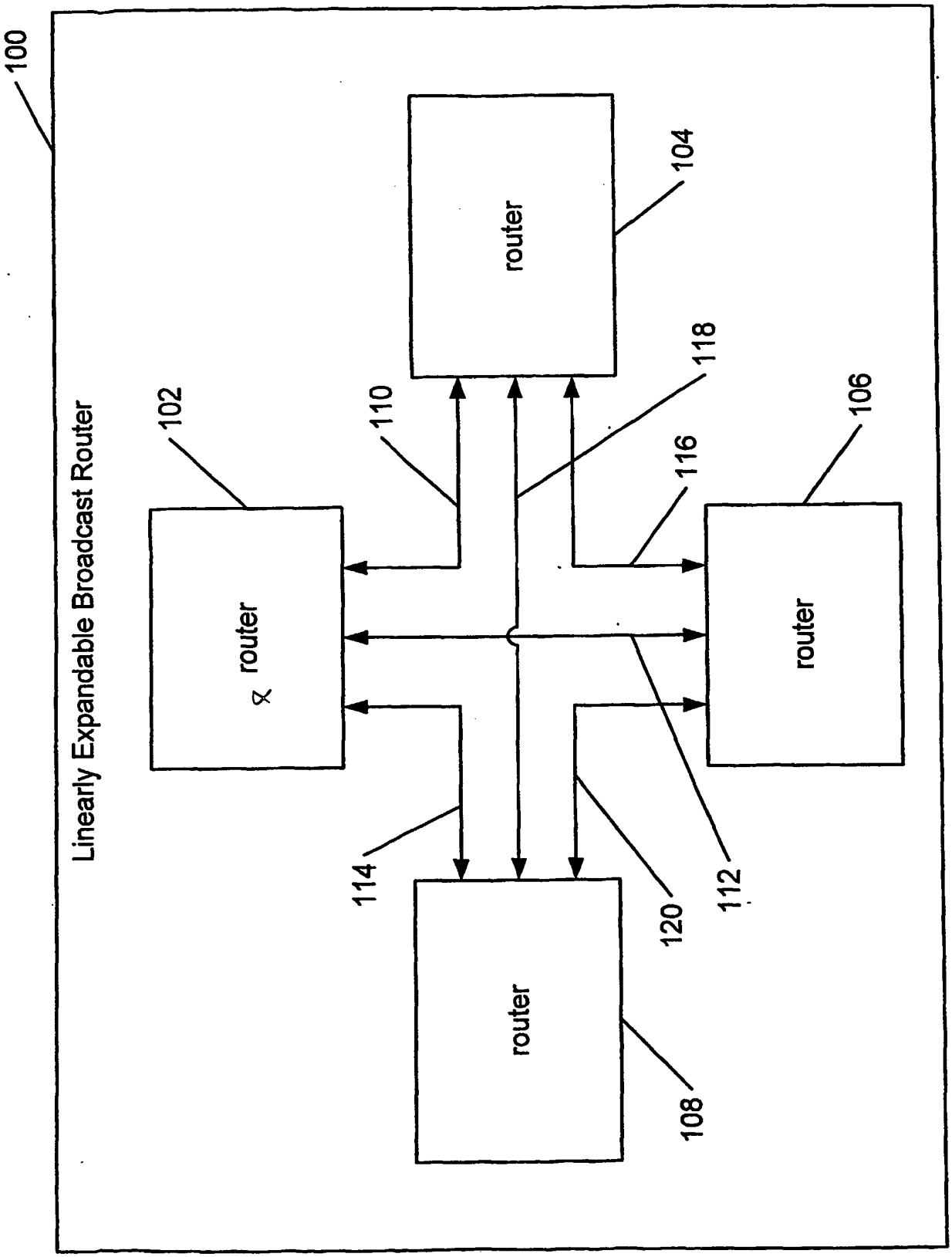
100
Linearly Expandable Broadcast Router
router
104
router
102
router
106
router
108
110
112
114
116
118
120

FIG. 1

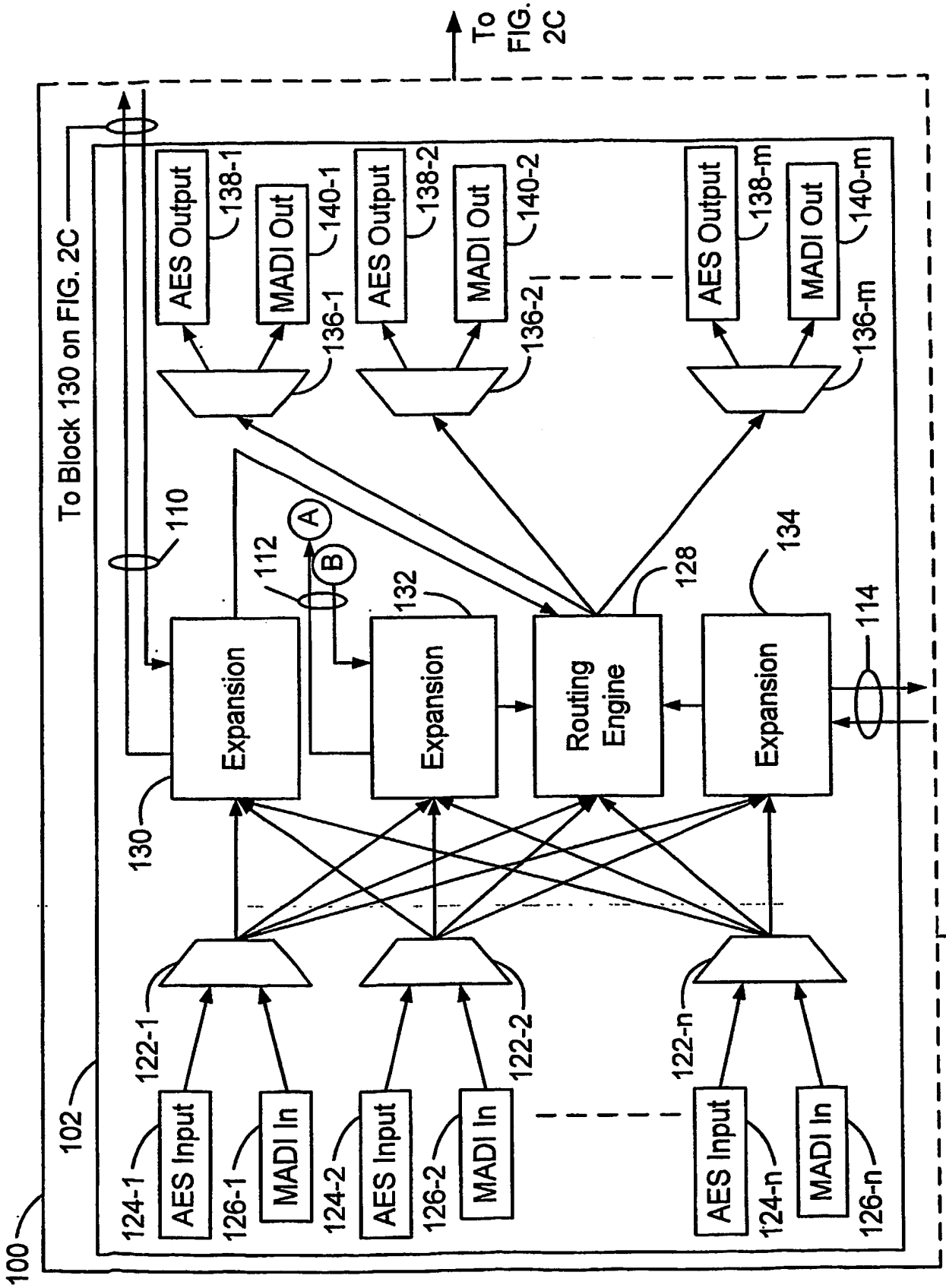
To FIG. 2C
To Block 130 on FIG. 2C
AES Output
138-1
MADI Out
140-1
136-1
AES Output
138-2
MADI Out
140-2
136-2
AES Output
138-m
MADI Out
140-m
136-m
110
112
A
B
132
128
134
114
Expansion
Expansion
Routing Engine
Expansion
130
122-1
122-2
122-n
102
100
124-1
AES Input
126-1
MADI In
124-2
AES Input
126-2
MADI In
124-n
AES Input
126-n
MADI In
To FIG. 2B

FIG. 2A

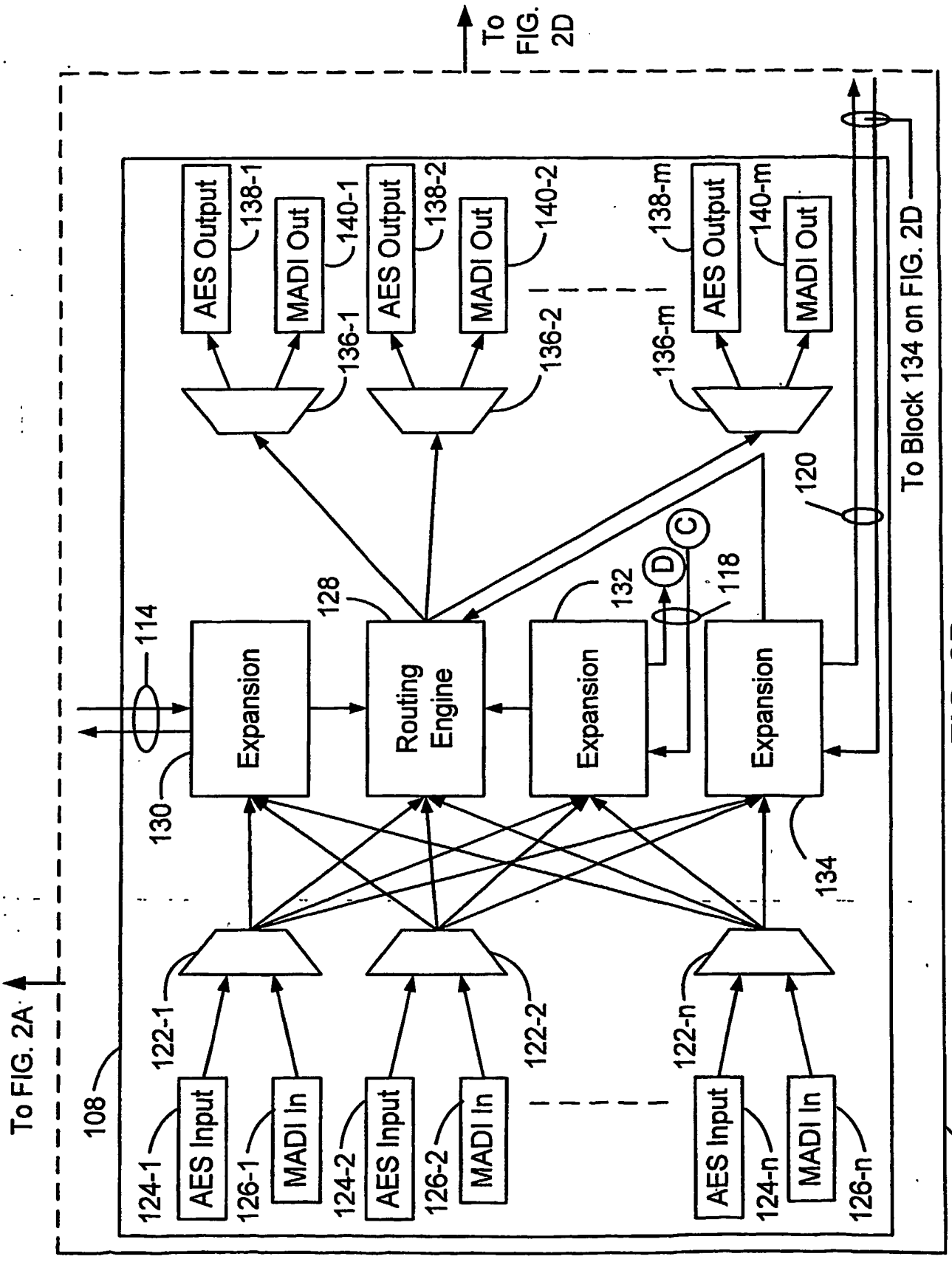
To FIG. 2D
To Block 134 on FIG. 2D
To FIG. 2A
AES Output
MADI Out
AES Input
MADI In
Expansion
Routing Engine
100
108
114
118
120
122-1
122-2
122-n
124-1
124-2
124-n
126-1
126-2
126-n
128
130
132
134
136-1
136-2
136-m
138-1
138-2
138-m
140-1
140-2
140-m
C
D

FIG. 2B

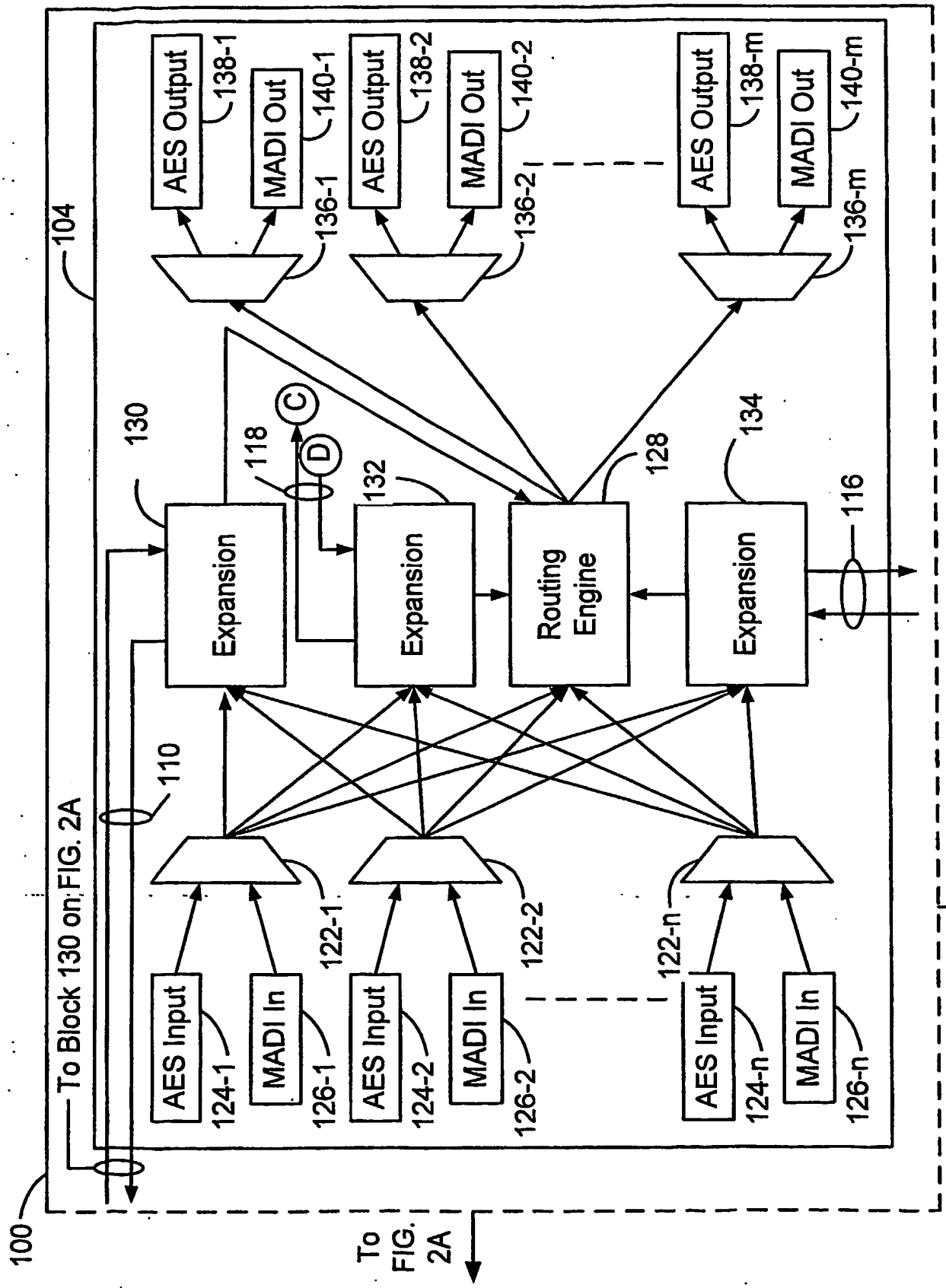
100
104
To Block 130 on FIG. 2A
To FIG. 2A
To FIG. 2D
AES Input
124-1
MADI In
126-1
122-1
AES Input
124-2
MADI In
126-2
122-2
AES Input
124-n
MADI In
126-n
122-n
110
Expansion
130
Expansion
132
Routing Engine
128
Expansion
134
116
118
C
D
AES Output
138-1
MADI Out
140-1
136-1
AES Output
138-2
MADI Out
140-2
136-2
AES Output
138-m
MADI Out
140-m
136-m

FIG. 2C

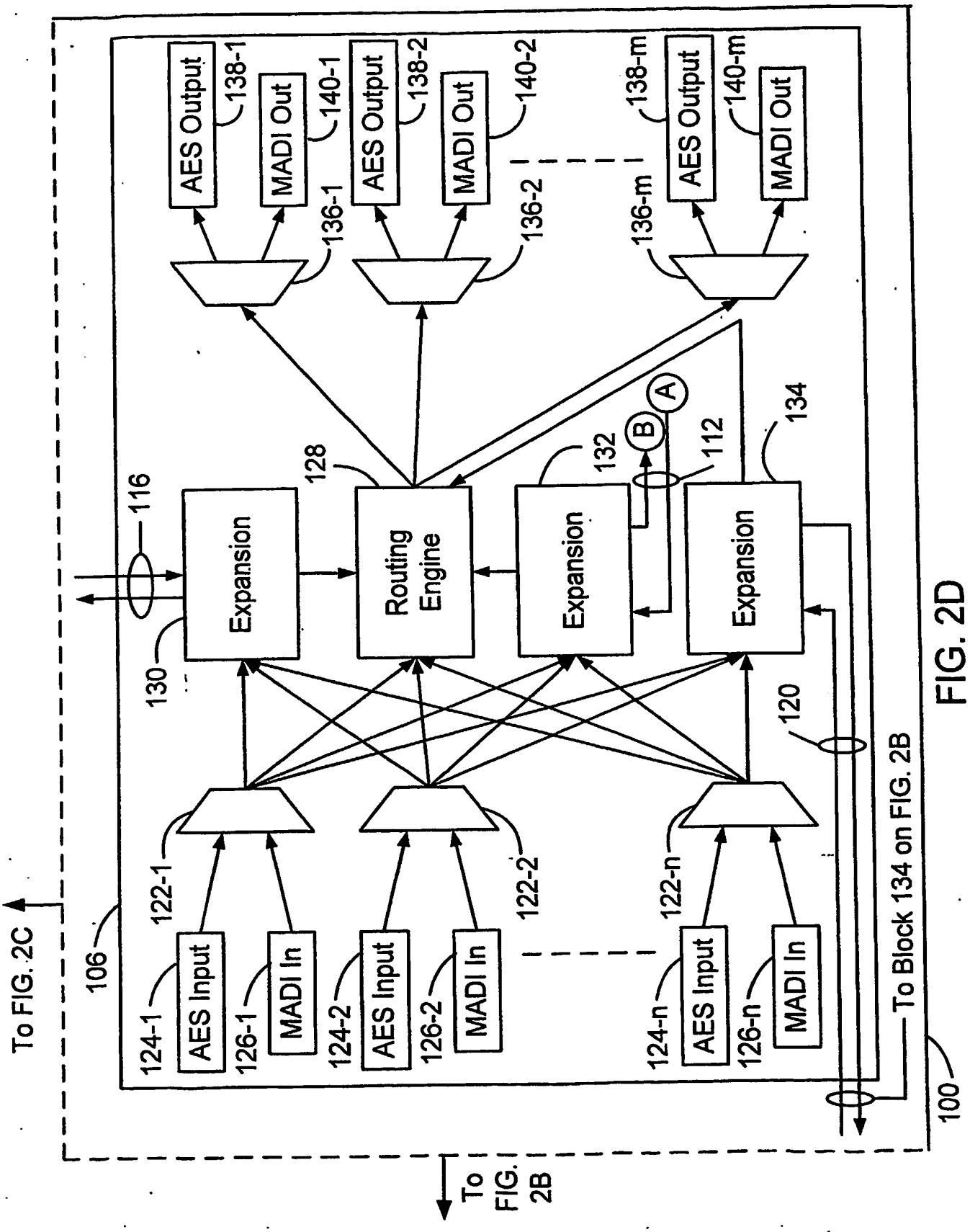
To FIG. 2C
106
AES Input
MADI In
124-1
126-1
122-1
124-2
126-2
122-2
124-n
126-n
122-n
120
Expansion
Routing Engine
Expansion
Expansion
130
116
128
132
134
112
A
B
AES Output
MADI Out
138-1
140-1
136-1
138-2
140-2
136-2
138-m
140-m
136-m
To Block 134 on FIG. 2B
100
To FIG. 2B

FIG. 2D

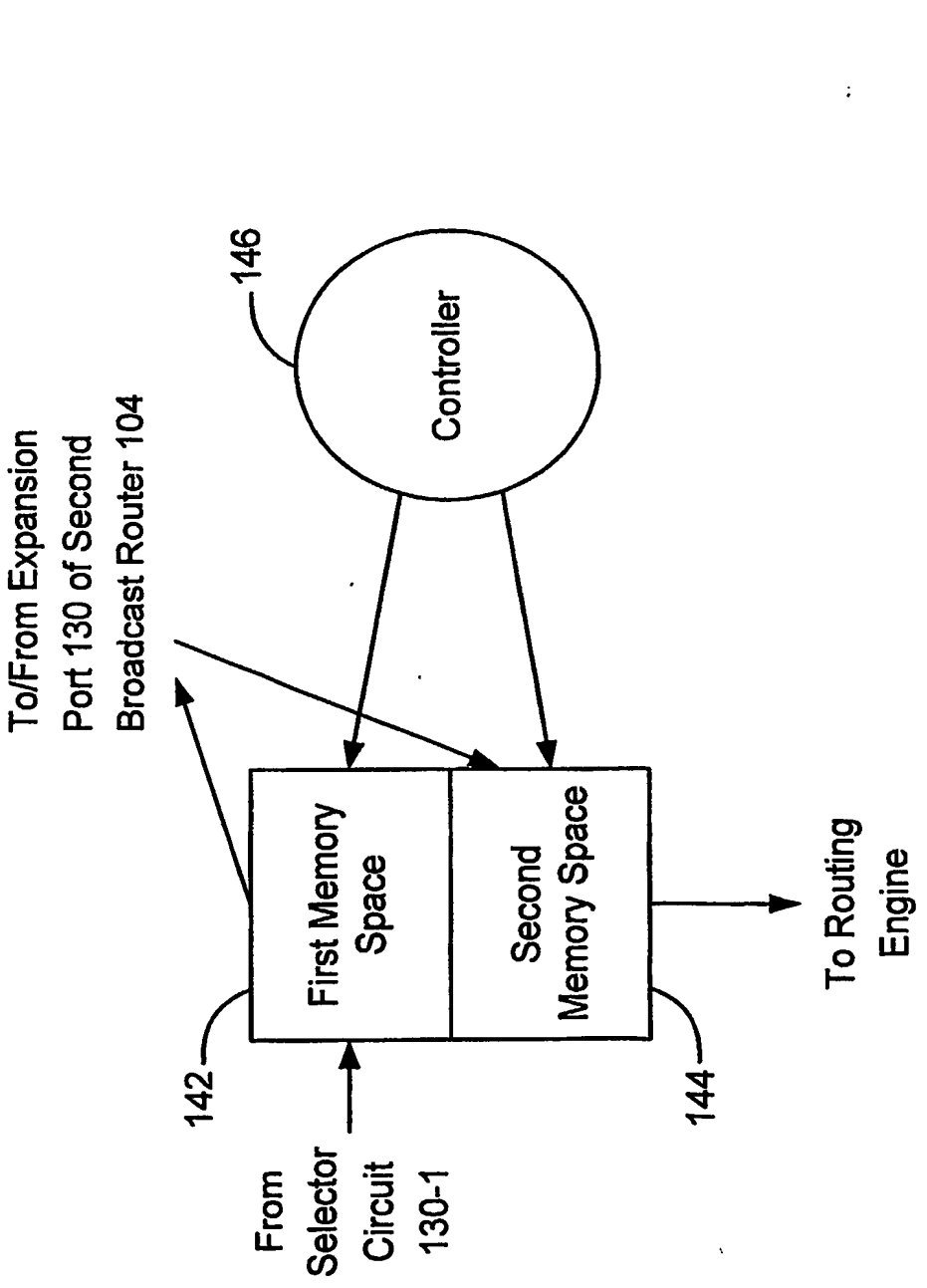
130
146
Controller
To/From Expansion
Port 130 of Second
Broadcast Router 104
First Memory
Space
Second
Memory Space
To Routing
Engine
142
144
From
Selector
Circuit
130-1

FIG. 3

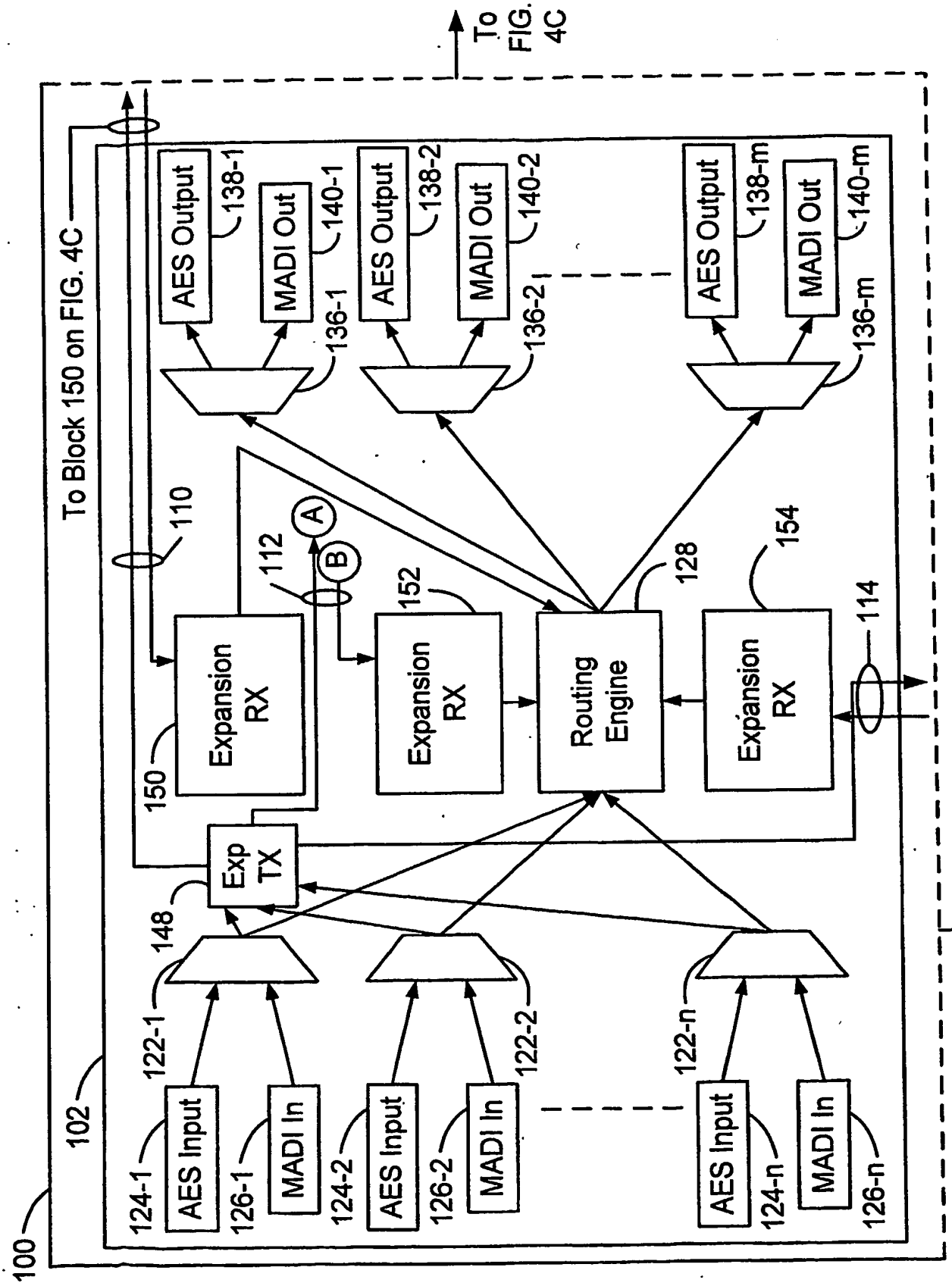
To FIG. 4C
To Block 150 on FIG. 4C
AES Output
138-1
MADI Out
140-1
136-1
AES Output
138-2
MADI Out
140-2
136-2
AES Output
138-m
MADI Out
140-m
136-m
110
112
A
B
152
128
154
114
Expansion RX
150
Expansion RX
Routing Engine
Expansion RX
Exp TX
148
122-1
122-2
122-n
AES Input
124-1
MADI In
126-1
AES Input
124-2
MADI In
126-2
AES Input
124-n
MADI In
126-n
102
100
To FIG. 4B

FIG. 4A

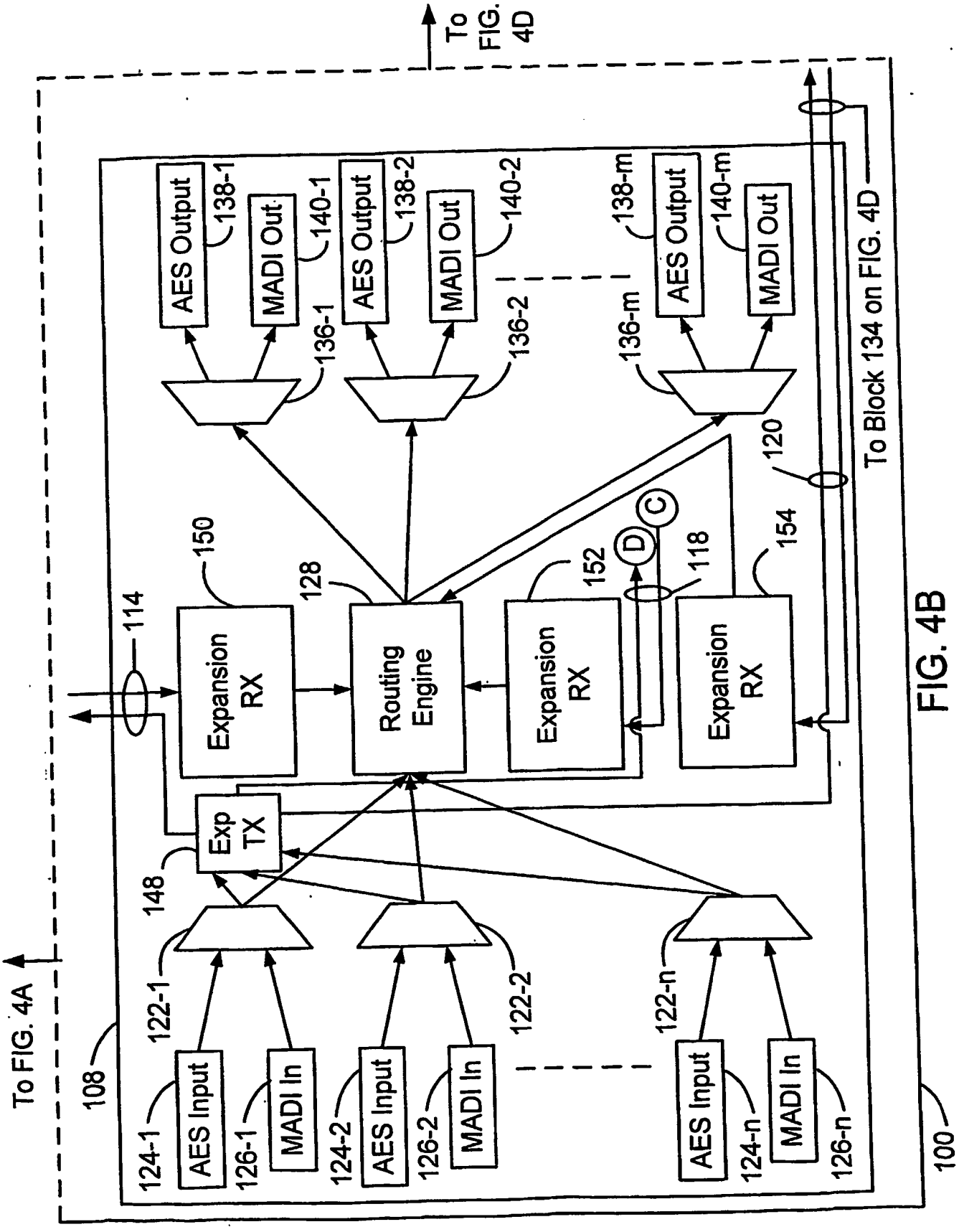
To FIG. 4D
To Block 134 on FIG. 4D
To FIG. 4A
AES Output
MADI Out
AES Input
MADI In
Expansion RX
Routing Engine
Exp TX
100
108
114
118
120
122-1
122-2
122-n
124-1
124-2
124-n
126-1
126-2
126-n
128
136-1
136-2
136-m
138-1
138-2
138-m
140-1
140-2
140-m
148
150
152
154
C
D

FIG. 4B

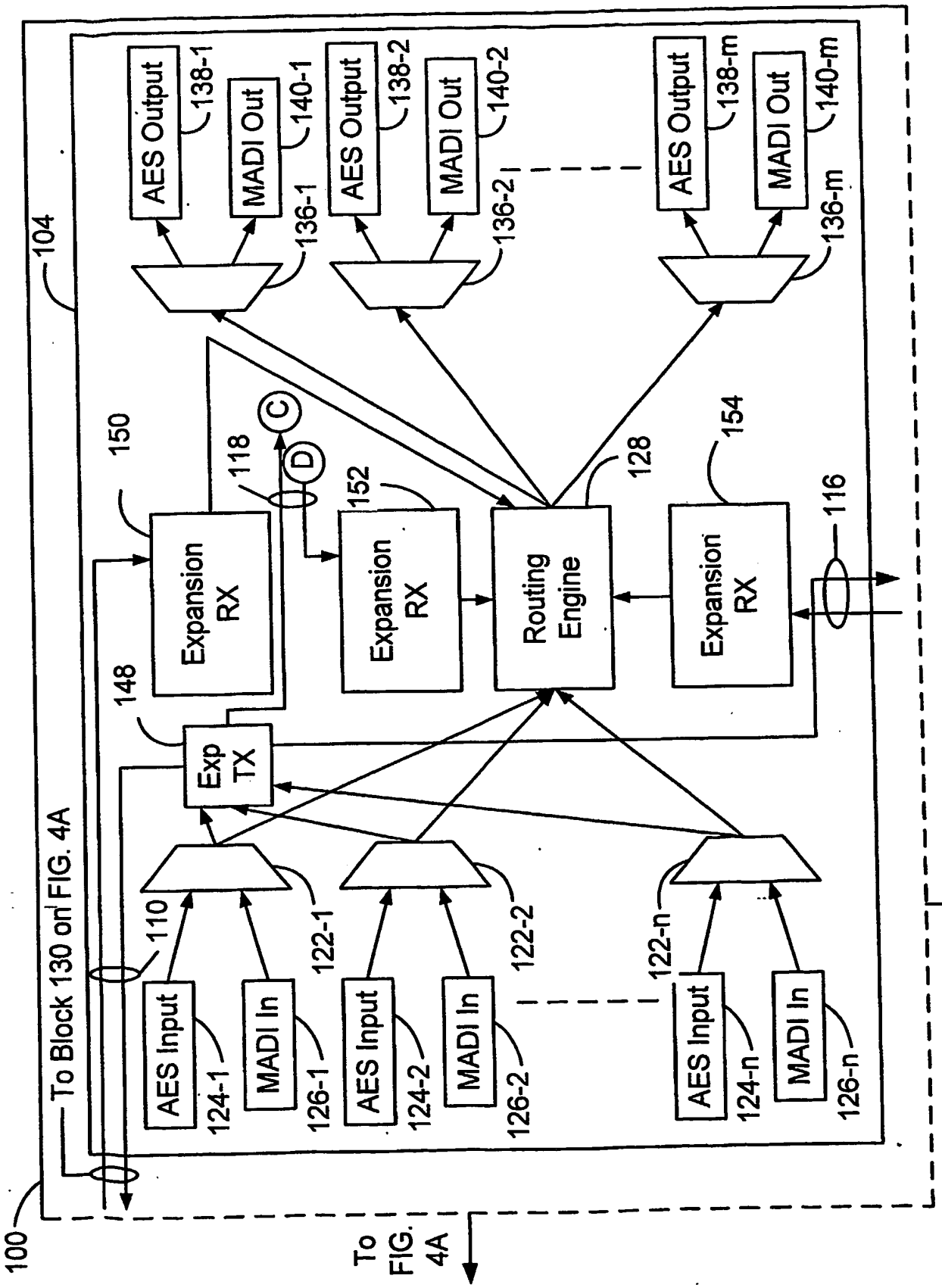
100
104
To Block 130 on FIG. 4A
To FIG. 4A
To FIG. 4D
AES Input
MADI In
AES Output
MADI Out
Exp TX
Expansion RX
Routing Engine
110
116
118
122-1
122-2
122-n
124-1
124-2
124-n
126-1
126-2
126-n
128
136-1
136-2
136-m
138-1
138-2
138-m
140-1
140-2
140-m
148
150
152
154
C
D

FIG. 4C

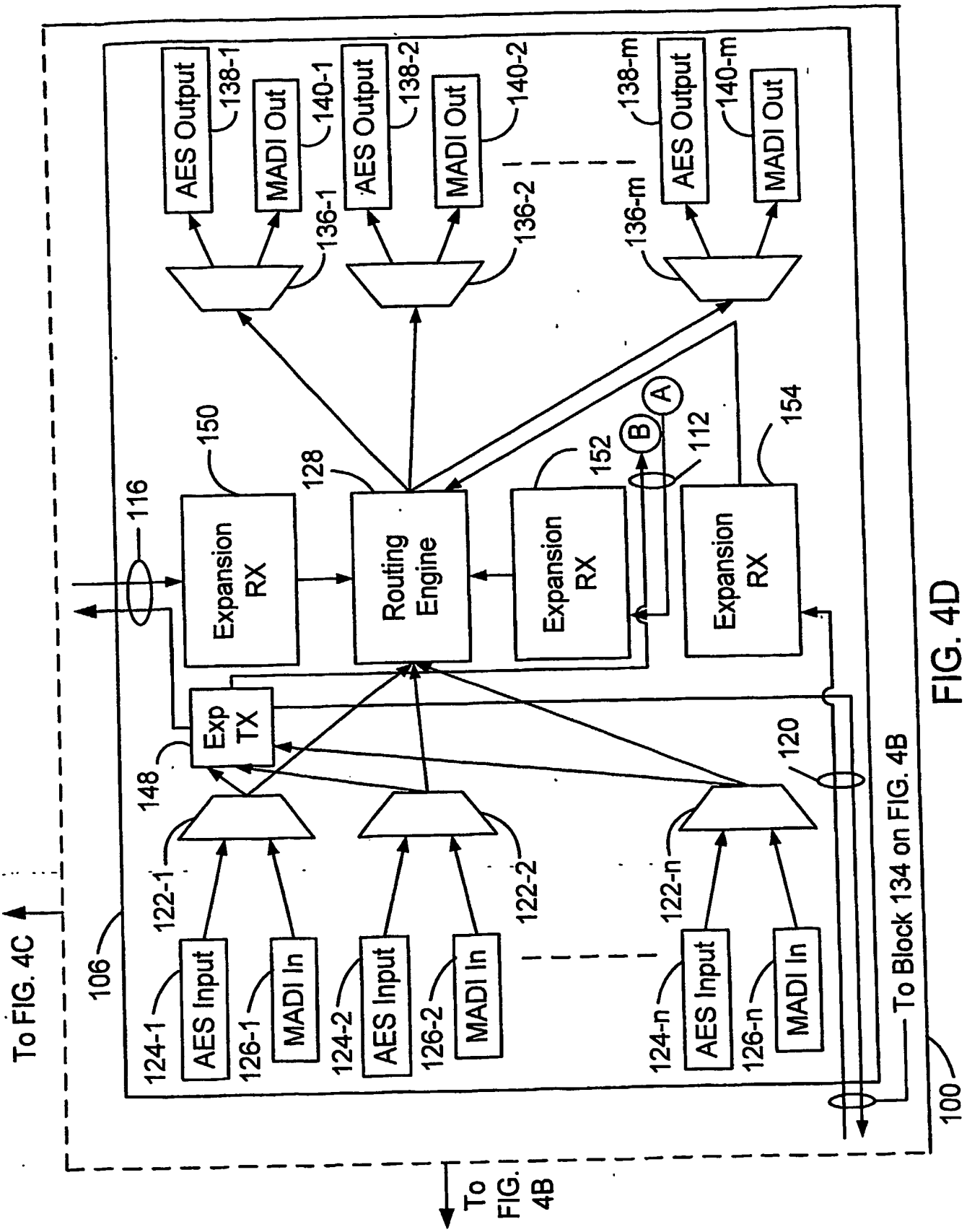
To FIG. 4C
106
124-1
AES Input
126-1
MADI In
124-2
AES Input
126-2
MADI In
124-n
AES Input
126-n
MADI In
122-1
122-2
122-n
148
Exp TX
116
Expansion RX
150
128
Routing Engine
Expansion RX
152
B
A
112
Expansion RX
154
120
136-1
136-2
136-m
AES Output
138-1
MADI Out
140-1
AES Output
138-2
MADI Out
140-2
AES Output
138-m
MADI Out
140-m
To Block 134 on FIG. 4B
100
To FIG. 4B

FIG. 4D